

### **AMENDMENTS TO THE CLAIMS**

1. (Currently amended) A computer-implemented method for processing information on a nucleotide sequence comprising the steps of:

transmitting, under control of a first processor, request information on a provision of an object or service ~~being suitable~~ for an individual to a second processor via a communication network[~~[,]~~];

receiving from the second processor, via the communication network, positional information representing a position in a nucleotide sequence corresponding to the request information transmitted in the above transmitting step, wherein the first processor is permitted to access a first memory area storing positional information and nucleotide sequence-related information regarding ~~[[an]]~~ the individual;

accessing, under the control of the first processor, a second memory area storing ~~a plurality of pieces of positional information and flag information for evaluating adequacy of transmission of nucleotide sequence-related information corresponding to the positional information~~ corresponding to positional information, the second memory area being separate from or part of the first memory area;

searching the second memory area for flag information corresponding to ~~at least part of the pieces of~~ positional information that ~~[[are]]~~ is received in the receiving step, and retrieving the ~~respective pieces of~~ flag information;

~~evaluating the adequacy of transmission of~~ determining, based on the retrieved flag information, whether or not nucleotide sequence-related information corresponding to the positional information received in the receiving step should be transmitted to the second processor ~~based on the retrieved flag information corresponding to the positional information received in the receiving step; and~~

~~retrieving, when the first processor evaluates the transmission of the nucleotide sequence-related information is adequate in the evaluating step, the nucleotide sequence-related information from the first memory area to transmit the retrieved nucleotide sequence-related information to the second processor, via the~~

~~communication network, wherein the transmitted nucleotide sequence-related information corresponds to the positional information received in the receiving step~~

if said nucleotide sequence-related information is determined to be transmitted,  
retrieving said nucleotide sequence-related information from the first  
memory area; and  
outputting the retrieved nucleotide sequence-related information to the  
second processor,

wherein the above steps are conducted under the control of the first processor.

2-8. (Cancelled).

9. (Currently amended) The method for processing information on a nucleotide sequence according to claim 1, wherein the positional information received in the receiving step is retrieved, based on a classification that matches with the request information, in processing in the second processor, from a third memory area, in the second processor, storing classification information in association with positional information regarding the request information on the provision of the object or service suitable for an individual, and positional information, wherein the classification information and the positional information are stored so as to be related to each other.

10. (Previously Presented) The method for processing information on a nucleotide sequence according to claim 1, wherein the flag information searched in the searching step corresponds to all of the pieces of positional information that are received in the receiving step.

11. (Previously Presented) The method for processing information on a nucleotide sequence according to claim 1, wherein the flag information corresponds to a piece of positional information or a combination of a plurality of pieces of positional information.

12. (New) The method for processing information on a nucleotide sequence according to claim 1, wherein, if said nucleotide sequence-related information is determined not to be transmitted in the determining step, the method further comprises the steps of:

- canceling the processing; and
- outputting a notification of refusal to transmit said nucleotide sequence-related information to the second processor.

13. (New) An apparatus for processing information on a nucleotide sequence comprising:

- a transmitter/receiver for transmitting request information on a provision of an object or service for an individual to a second processor via a communication network, and receiving from the second processor, via the communication network, positional information representing a position in a nucleotide sequence corresponding to the request information transmitted, wherein the apparatus is permitted to access a first memory area storing positional information and nucleotide sequence-related information regarding the individual; and

- a controller for accessing a second memory area storing flag information corresponding to positional information, the second memory area being separate from or part of the first memory area, and for searching the second memory area for flag information corresponding to the positional information that is received by the transmitter/receiver, and for retrieving the flag information and for determining, based on the retrieved flag information, whether or not nucleotide sequence-related information corresponding to the positional information received by the transmitter/receiver should be transmitted to the second processor, wherein, if the controller determines said nucleotide sequence-related information to be transmitted, the controller retrieves said nucleotide sequence-related information from the first memory area, and outputs the retrieved nucleotide sequence-related information to the second processor.

14. (New) The apparatus for processing information on a nucleotide sequence according to claim 13, wherein the positional information received by the transmitter/receiver is retrieved, based on a classification that matches with the request information, from a third memory area in the second processor, storing classification information in association with positional information.

15. (New) The apparatus for processing information on a nucleotide sequence according to claim 13, wherein the controller searches for flag information corresponding to all of the pieces of positional information that are received by the transmitter/receiver.

16. (New) The apparatus for processing information on a nucleotide sequence according to claim 13, wherein the flag information corresponds to a piece of positional information or a combination of a plurality of pieces of positional information.

17. (New) The apparatus for processing information on a nucleotide sequence according to claim 13, wherein, if the controller determines said nucleotide sequence-related information not to be transmitted, the controller cancels the processing, and outputs a notification of refusal to transmit said nucleotide sequence-related information to the second processor.

18. (New) A recording medium having a program for processing information on a nucleotide sequence recorded thereon which allows a computer to execute a method comprising the steps of:

transmitting, under control of a first processor, request information on a provision of an object or service for an individual to a second processor via a communication network;

receiving from the second processor, via the communication network, positional information representing a position in a nucleotide sequence corresponding to the request information transmitted in the above transmitting step, wherein the first processor is permitted to access a first memory area storing positional information and nucleotide sequence-related information regarding the individual;

accessing, under the control of the first processor, a second memory area storing flag information corresponding to positional information, the second memory area being separate from or part of the first memory area;

searching the second memory area for flag information corresponding to the positional information that is received in the receiving step, and retrieving the flag information;

determining, based on the retrieved flag information, whether or not nucleotide sequence-related information corresponding to the positional information received in the receiving step should be transmitted to the second processor; and

if said nucleotide sequence-related information is determined to be transmitted, retrieving said nucleotide sequence-related information from the first memory area; and

outputting the retrieved nucleotide sequence-related information to the second processor,

wherein the above steps are conducted under the control of the first processor.

19. (New) The recording medium having a program for processing information on a nucleotide sequence according to claim 18, wherein the positional information received in the receiving step is retrieved, based on a classification that matches with

the request information from a third memory area, in the second processor, storing classification in association with positional information.

20. (New) The recording medium having a program for processing information on a nucleotide sequence according to claim 18, wherein the flag information searched in the searching step corresponds to all of the pieces of positional information that are received in the receiving step.

21. (New) The recording medium having a program for processing information on a nucleotide sequence according to claim 18, wherein the flag information corresponds to a piece of positional information or a combination of a plurality of pieces of positional information.

22. (New) The recording medium having a program for processing information on a nucleotide sequence according to claim 18, wherein, if said nucleotide sequence-related information is determined not to be transmitted in the determining step, the method further comprises the steps of:

canceling the processing; and

outputting a notification of refusal to transmit said nucleotide sequence-related information to the second processor.

23. (New) A computer program for processing information on a nucleotide sequence which allows a computer to execute a method comprising the steps of:

transmitting, under control of a first processor, request information on a provision of an object or service for an individual to a second processor via a communication network;

receiving from the second processor, via the communication network, positional information representing a position in a nucleotide sequence corresponding to the request information transmitted in the above transmitting step, wherein the first processor is permitted to access a first memory area storing positional information and nucleotide sequence-related information regarding the individual;

accessing, under the control of the first processor, a second memory area storing flag information corresponding to positional information, the second memory area being separate from or part of the first memory area;

searching the second memory area for flag information corresponding to the positional information that is received in the receiving step, and retrieving the flag information;

determining, based on the retrieved flag information, whether or not nucleotide sequence-related information corresponding to the positional information received in the receiving step should be transmitted to the second processor; and

if said nucleotide sequence-related information is determined to be transmitted, retrieving said nucleotide sequence-related information from the first memory area; and

outputting the retrieved nucleotide sequence-related information to the second processor,

wherein the above steps are conducted under the control of the first processor.

24. (New) The computer program for processing information on a nucleotide sequence according to claim 23, wherein the positional information received in the receiving step is retrieved, based on a classification that matches with the request information from a third memory area, in the second processor, storing classification in association with positional information.

25. (New) The computer program for processing information on a nucleotide sequence according to claim 23, wherein the flag information searched in the searching step corresponds to all of the pieces of positional information that are received in the receiving step.

26. (New) The computer program for processing information on a nucleotide sequence according to claim 23, wherein the flag information corresponds to a piece of positional information or a combination of a plurality of pieces of positional information.

27. (New) The computer program for processing information on a nucleotide sequence according to claim 23, wherein, if said nucleotide sequence-related information is determined not to be transmitted in the determining step, the method further comprises the steps of:

canceling the processing; and

outputting a notification of refusal to transmit said nucleotide sequence-related information to the second processor.